OF SUGAR	CITY COUNCIL AGENDA REQUEST						
AGENDA OF:	07/03/07	AGENDA REQUEST NO:	ША				
INITIATED BY:	DANNY BATTS MANAGEMENT ASSISTANT	RESPONSIBLE DEPARTMENT:	Engineering				
PRESENTED BY:	PATRICK WALSH, PE ASSISTANT CITY ENGINEER	DEPARTMENT HEAD:	CHRISTOPHER STEUBING, PE CITY ENGINEER CLS				
		ADDITIONAL DEPARTMENT. HEAD (S):	N/A				
SUBJECT / PROCEEDING:	AMENDMENT TO UPDATE AND REVISE THE DESIGN STANDARDS FOR PUBLIC AND PRIVATE INFRASTRUCTURE SECOND READING ORDINANCE 1625						
EXHIBITS:	ORDINANCE 1625; PROPOSED DESIGN STANDARDS DOCUMENT IS AVAILABLE AT THE CITY COUNCIL OFFICES						
	CLEARANCES		APPROVAL				
LEGAL:	N/A	EXECUTIVE DIRECTOR:	JIM CALLAWAY COMMUNITY DEVELOPMENT				
Purchasing:	N/A	ASST. CITY MANAGER:	N/A				
BUDGET:	N/A	CITY MANAGER:	ALLEN BOGARD Colon Bogard				
BUDGET							
	EXPENDITURE REQUIRED: \$	N/A					
	AMOUNT BUDGETED/REALLOCATION: \$	N/A					
	ADDITIONAL APPROPRIATION: \$ N/A						
RECOMMENDED ACTION							
Public hearing, First Reading concerning the amendment to the Design Standards.							

EXECUTIVE SUMMARY

The Design Standards Update is nearing completion. This is a city-initiated amendment to Chapter 5 (Subdivision Regulations), of the Development Code, to update and revise the Design Standards for public and private infrastructure. This amendment is the result of an FY 04-05 strategic project.

The current design standards were originally adopted in 1989, and although they have been amended several times over the years, it was deemed necessary to provide a comprehensive update to ensure they are consistent with current infrastructure design and construction practices. Additionally, the current standards occasionally overlap or conflict with other City codes. This update includes an extensive review and modernization of the technical provisions of the Standards, as well as a streamlining of the amendment and variance processes. Additionally, three specific provisions (Maintenance Bonds, Easement Requirements, and Driveway Spacing Requirements) are being removed from the standards and placed in different sections of the Subdivision Regulations. Removing these substantive policy issues from the Standards will allow the approval of variances from and amendments to the technical requirements of the Standards administratively.

Staff coordinated this update with the Development Committee, which established a subcommittee consisting of 15 members of the development community to review the proposed draft and provide feedback. This committee met for more than 25 hours between August and November of 2006 and provided more than 200 substantive comments and suggestions for the improvement of the Standards.

A workshop was held with the City Council on January 2nd, 2007. At that time the Council expressed concern about the original proposal, which vested the City Engineer with the sole authority and responsibility to approve both variances from and amendments to the Design Standards. Council suggested that any variances or amendments to the Design Standards should be approved by both the City Engineer and the City Manager, which would provide additional procedural safeguards while at the same time equitably distributing responsibility & accountability for any approved variances and amendments. This suggestion has been incorporated into the proposed ordinance.

A Public Hearing was held before the City Council on June 5th, 2007. At that time the Council expressed support for allowing the City Engineer and City Manager to make amendments to the technical requirements of the Standards, but also expressed a desire to periodically review and readopt the Design Standards in their entirety. To address this concern, a provision has been added to the ordinance adopting the new Design Standards which states that the Council will review and re-adopt the Design Standards in five years. This will give Council the opportunity to be briefed on the type and number of amendments that will be made over the next five years.

EXHIBITS

A copy of the Proposed Design Standards Document is available at the City Council Offices.

Proposed Ordinance Text:

ORDINANCE NO. 1625

AN ORDINANCE OF THE CITY OF SUGAR LAND, TEXAS, AMENDING CHAPTER 5 (SUBDIVISION REGULATIONS) OF THE CITY OF SUGAR LAND DEVELOPMENT CODE BY ALLOWING FUTURE REVISIONS TO THE SUGAR LAND DESIGN STANDARDS BY ADMINISTRATIVE ACTION UNDER SPECIFIC CONDITIONS, AND ADOPTING NEW DESIGN STANDARDS.

WHEREAS, the City Council has held a public hearing on this ordinance providing for an amendment to the City's subdivision regulations as required by section 212.002 of the Local Government Code; and

WHEREAS, the City Council wishes to delegate to the City's administrative staff the authority to revise the Design Standards without city council approval under specific conditions; NOW, THEREFORE;

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SUGAR LAND, TEXAS:

- **Section 1**. That the Design Standards dated November 1989 are repealed.
- **Section 2.** That the Design Standards dated June 2007, and attached as Exhibit A, are hereby adopted.
- **Section 3.** That section 5-21 of the Development Code is amended to read as follows:

Sec. 5-21. Easements.

- A. All Utility easements must be shown on the final plat.
- B. Where a subdivision is traversed by a watercourse, ditch, drainageway, or channel, the subdivider must provide a stormwater easement or drainage right-of-way conforming substantially with the course and of such additional width as may be designated by the city or Fort Bend County Drainage District, subject to determination using proper engineering considerations. Maintenance easements must be specified.
- C. Easements must conform to the following regulations:
- 1. Water Related Easements.
- a. Fire hydrants located outside of a street right-of-way or water line easement must be placed in a 10-foot by 10-foot easement.
- b. Water meters 2-inches and smaller in diameter may be set in a street right-of-way or water line easement.

- c. Water meters larger than two-inches in diameter must be set in a 10-foot by 20-foot water meter easement. Variations for the placement of multiple meters require Specific Approval.
- d. Water mains located in easements not adjacent to street rights-of-way must be centered in a 16-foot wide easement.
- e. Water lines located between two single-family homes may be centered in a 10-foot wide easement if the line is cased in C900 casing from the front building line to within 15 feet of the rear lot line, leaving non-cased pipe at the rear lot line, and having gate valves on both ends of the line in order to isolate the section.
- f. Water mains, except at a flush valve, located in a street right-of-way less than 5 feet from the street right-of-way line must have a water line easement adjoining the street right-of-way. Easements adjoining a street right-of-way for water mains smaller than 12 inches in diameter must have a minimum width of 5 feet. Easements adjoining a street right-of-way for water mains 12 inches or greater in diameter must have a minimum width of 10 feet.
- 2. Sanitary Sewer Easements
- a. Rear lot sanitary sewer lines are not permitted in new residential developments.
- b. The minimum width of a sanitary sewer easement is 16 feet.
- c. The preferred location for sanitary sewers is in the street right-of-way. Sanitary sewers placed at a depth of less than 10 feet below grade and within five feet of the edge of a street right-of-way must have an exclusive 5-foot sanitary sewer easement adjoining the street right-of-way or easement. Sanitary sewers placed at a depth equal to or greater than 10 feet below grade and within 5 feet of the edge of street right-of-way must have an exclusive 10-foot sanitary sewer easement adjoining the street right-of-way or easement.
- d. Easements for force mains of all sizes must have a minimum width of 16 feet for a single force main when the force main is not located adjacent to a street right-of-way. When the force main is located in an easement adjacent to a street right-of-way, the force main must be located at the center of a 10-foot wide easement. When the force main is located less than 5 feet from the street right-of-way line within the street right-of-way, the force main must have an easement adjacent to the street right-of-way with a minimum width of 5 feet.
- e. Sanitary sewer mains, trunk or force mains must be located so that the centerline of the pipe is at least $7\frac{1}{2}$ feet from the edge of the easement.
- f. Where sanitary sewers or force mains are installed in easements separated from street rightsof-way by other private or utility company easements, the sanitary sewer easement must be extended along or across the private utility company easement to provide access for maintenance of the sewer or force main.

- g. Combined storm and sanitary sewer easements have the minimum widths as required for storm sewer easements below. When placed in a combined storm and sanitary sewer easement, sanitary sewer mains, trunk or force mains must be located so that the centerline of the pipe is not less than 7 ½ feet from the edge of the easement.
- h. For combined storm and sanitary sewer easements located adjacent to public rights-of-way where the sanitary sewer is located along the outside of the easement, the centerline of the sanitary sewer pipe must be located at least 7 ½ feet from the edge of the easement.

3. Storm Sewer Easement

- a. Storm sewers located in an easement adjacent to a street right-of-way or other public easement must have a minimum easement width of 10 feet.
- b. Storm sewers not located in an easement adjacent to a street right-of-way or other public easement have a minimum easement width of 20 feet. All sewers must be constructed in the center of the easement.
- c. Storm sewers with a diameter or width greater than 10 feet but less than 15 feet have a minimum easement width of 25 feet.
- d. The City Engineer will determine the minimum easement width for a storm sewer greater than 15-feet in diameter or width.
- e. Storm sewers with a flow line depth between 15-feet and 20-feet have a minimum easement width of 40 feet.
- f. Storm sewers with a flow line depth greater than 20 feet have a minimum easement width of 50 feet and require a Specific Approval through the process outlined in the Design Standards.
- g. Storm sewers must be located so that there is at least 5 feet from the outside edge of the storm sewer to the edge of the easement.
- h. When approvals are granted for a special use or combination easement along a side or back lot line, the minimum easement width is 25 feet.

4. Drainage Easements.

a. All dry detention basins will have a maintenance easement dedicated around the detention facility. Basins less than or equal to 6 feet in depth will have a maintenance easement with a minimum width of 15 feet. Basins with a depth of between 6 feet and 9 feet will have a maintenance easement with a minimum width of 20 feet. Basins greater than 9 feet in depth will have a maintenance easement with a minimum width of 25 feet.

b. All wet ponds and amenity lakes will have a maintenance easement dedicated around the detention facility. Facilities less than or equal to 10 feet in depth will have a maintenance easement with a minimum width of 15 feet. Facilities greater than 10 feet in depth will have a maintenance easement with a minimum width of 20 feet.

Section 4. That section 5-28 of the Development Code is amended to read as follows:

Sec. 5-28. Adoption of design standards.

- A. The City of Sugar Land Design Standards, dated June 2007, are adopted in furtherance of the implementation and administration of this chapter.
- B. The City Engineer may from time-to-time add to, delete from, or revise the Design Standards without council action if the revision:
 - 1. Does not conflict with a provision of this chapter;
 - 2. Is for the purpose of providing detailed or technical specifications, requirements, or procedures applicable to the matters regulated under this chapter, but does not implement new substantive regulations or requirements not addressed in this chapter (Example: this chapter establishes whether or not sidewalks are required in particular cases; the Design Standards specifies the type of construction material, depth of material, and other construction specifications);
 - 3. Is adopted in compliance with written procedures, as approved by the city manager, that provide for public notice, an opportunity for public comment, and consideration of any public comments prior to adoption; and
 - 4. Is approved by the City Manager.
- C. Any person required to comply with a provision of this Chapter must also comply with any applicable provisions of the Design Standards as a condition of approval of any activity, permit, plat, or other approval required under this Chapter or the Design Standards.

Section 5. That section 5-35(K) of the Development Code is amended to read as follows:

K. Maintenance bond required. Before the release of any surety instrument guaranteeing the construction of required subdivision improvements or the signing of the final plat where subdivision improvements were made prior to the filing of the final plat for recordation the subdivider will furnish the city with a maintenance bond or other surety instrument to assure the quality of materials and workmanship and maintenance of all required improvements. The maintenance bond or other surety instrument must be satisfactory to the City as to form, sufficiency, and manner of execution. The bond will be in compliance with **Table A: Bond Requirements for Public Infrastructure.**

Whenever a defect or failure of any required improvement occurs within the period of coverage, the city will require that a new maintenance bond or surety instrument be posted for a period of one full calendar year sufficient to cover the corrected defect or failure.

Section 6. That a new Table A is added to the end of section 5-35 to read as follows:

Table A: Bond Requirements for Public Infrastructure

IMPROVEMENTS COVERED BY BOND	BOND AMOUNT	BOND TYPE	BOND RELEASE	ACCEPTANCE			
Projects within City limits							
Water, sanity sewer and drainage improvements	10% of total construction cost.	Maintenance bond in the name of the City. When a MUD* project, maintenance bond in the name of the MUD.	At acceptance by the City. One year after construction completion at acceptance by the MUD	One year after construction completion			
Public Streets and Sidewalks	10% of total construction cost.	Maintenance bond in the name of the City.	At acceptance by the City.	One year after construction completion and not until the sidewalks in all common areas area complete			
Commercial Development	10% of total construction cost.	Maintenance bond in the name of the City.	At acceptance by the City.	One year after construction completion and not until the streetlights are completely installed.			
Arterials and Collectors without homes fronting.	10% of total construction cost.	Maintenance bond in the name of the City.	At acceptance by the City.	One year after construction completion and not until the sidewalks and streetlights are complete.			
Projects within the Extraterritorial Juris	diction						
Water, sanity sewer and drainage improvements	10% of total construction cost.	Maintenance bond in the name of the County.** When a MUD* project, maintenance bond in the name of the MUD.	At acceptance by the County. One year after construction completion at acceptance by the MUD	Upon annexation and one year after construction completion.			
Public Streets and Sidewalks	10% of total construction cost.	Maintenance bond in the name of the County.	At acceptance by the County.	Upon annexation and one year after construction completion and not until the sidewalks in all common areas are complete.			
Commercial Development	10% of total construction cost.	Maintenance bond in the name of the County.	At acceptance by the County.	Upon annexation and one year after construction completion and not until the streetlights are complete.			
Street Lights	10% of total construction cost.	Performance bond in the name of the County.	At construction completion of the streetlights.	Upon annexation and one year after construction completion and not until the street lights are complete			
Arterials and Collectors without homes fronting.	10% of total construction cost.	Maintenance bond in the name of the County.	At paving acceptance by the County.	Upon annexation and one year after construction completion and not until the sidewalks and streetlights are complete.			
*: Municipal Utility District (MUD) **: Fort Rand County TY							

^{**:} Fort Bend County, TX

Section 7. That a new Article VIII is added to chapter 5 to read as follows:

ARTICLE VIII. Driveways

Sec. 5-50. Driveway width requirements.

- A. Single-family residential driveways must be constructed with a minimum width of 10 feet at the right-of-way line.
- B. Non-single-family residential and multi-family driveways that connect to an arterial street, highway, or freeway must be 35 feet wide.
 - C. Other non-residential driveways must be a minimum of 25 feet wide.
- D. Driveways for utility facilities may be constructed using single-family residential driveway standards with Specific Approval from the City Engineer.

Sec. 5-51. Non-residential driveway separation requirements.

- A. The location of all non-single-family residential driveways that will connect to a public street must be approved by the City Engineer prior to construction.
- B. To reduce the number of conflict points and to facilitate traffic flow on arterial and collector streets, non-residential driveways may be placed no closer than the following distances from adjacent streets and driveways (measured from the projected curb line of the existing intersecting street or driveway to the projected curb line of the proposed driveway):

Roadway Classification	Minimum Separation
Highways/Freeways	200', or greater as determined by
Intersecting Highways/Freeways	Traffic Impact Analysis
U.S. 59, U.S. 90A, S.H. 99	
Highways:	200'
S.H. 99, S.H. 6, U.S. 90A	
Arterial:	165'
As indicated on Thoroughfare Plan	
Major Collector:	165'
As indicated on Thoroughfare Plan	
Minor Collector:	165'
As indicated on Thoroughfare Plan	
Local Street	75'
Cul-de-sac bulb	50'

C. If the separation requirements for non-single-family residential driveways cannot be met because of the location of existing driveways on adjoining tracts, joint access driveways or access easements across adjoining tracts should be used. The City Engineer will grant a Specific Approval for an access driveway when the Design Engineer provides documentation showing: (1) the

minimum separation requirements cannot be met with the existing driveway on the adjacent property, (2) reasonable efforts have been made to obtain joint access and it cannot be obtained, and (3) access cannot be obtained to any other public street. When granting a Specific Approval, the City Engineer will indicate the approved location of the driveway and to the extent possible, will maximize the distance between the new driveway and the nearest intersecting public street.

5-52. Non-residential driveway alignment.

A. On streets classified as collectors, arterials, and highways that do not contain medians, non-single-family residential driveways will align with driveways on the opposite side of the street and meet the minimum separation requirements from existing driveways on both sides of the street. Undivided collector streets within industrial zoned areas, the opposite side driveway separation requirement may be waived by the City based upon a review of traffic and safety conditions. Driveways must be aligned with existing median openings, or be located an adequate distance from the median opening so that a driveway at the median opening will meet separation requirements whenever possible.

- B. At an intersection in which one public street terminates at the intersection of a connecting cross street, a driveway on the cross street in alignment with the terminating street must safely accommodate the cross-section of the intersecting public street.
- C. Driveways must be located and designed so as to have adequate sight distances along the intersecting street as defined in Appendix D of the City's Design Standards.

5-53. Driveway radius standards.

- A. Driveway radii may not extend beyond the projection of a property corner to the back of curb.
- B. Non-single-family residential minimum driveway radii accessing an arterial must have a radius of at least 35 feet. Radii for non-single-family residential driveways on other roadways are a minimum of 25 feet.
- C. Single-family residential minimum driveway radii accessing a local street must have a radius of at least 5 feet. Radii for single-family residential driveways on other roadways (minor collector and above) are a minimum of 10 feet.

Sec. 5-54. Variances to driveway requirements.

City Council may authorize a variance to any driveway requirement in this Article for which Specific Approval authority has not been granted to the City Engineer. A request for a variance must be submitted to the City Engineer's office in writing. The request must include the justification for the variance, drawings providing sufficient detail to describe the request, and traffic data or any other supporting information. Incomplete requests will be rejected until all items are addressed by the Applicant. Any work related to the variance that proceeds without approval of a variance is subject to removal and replacement in accordance with the City's Design Standards at the sole expense of the Applicant.

Section 8. That the City will review the Design Standards adopted by this Ordinance in five years.

Section 9. That the provisions of this ordinance are severable and the invalidity of any part of this ordinance shall not affect the validity of the remainder of the ordinance.

APPROVED on first consideration	on on	2007.
ADOPTED upon second consider	ADOPTED upon second consideration on	
	David G. Wall	ace, Mayor
ATTEST:		
Glenda Gundermann, City Secretary		
Reviewed for Legal Compliance:		
Meredith Wilganowski		

Attachments: Exhibit A – Sugar Land Design Standards dated June 2007